

METHODS AND APPARATUS FOR CONVERSION
OF RADAR RETURN DATA

ABSTRACT OF THE DISCLOSURE

An in-phase/quadrature component (IQ) mixer is configured to reject returns from a negative doppler shift swath in order to mitigate corruption of returns of a positive doppler shift swath. The mixer includes a sample delay element which produces a quadrature component from the in-phase component of an input signal.

- 5 Further included are a plurality of mixer elements, a plurality of low pass filters, a plurality of decimators, and a plurality of all pass filters which act upon both the in-phase and quadrature components of the input signal. Also, a subtraction element is included which is configured to subtract the filtered and down sampled quadrature component from the filtered and down sampled in-phase component.